

Claims

[1] 1. A fixer for a fiber bragg grating sensor S to measure a strain of an object to be measured, the fixer including a pair of fixing pieces 3 for securing the fiber bragg grating sensor S to the object, wherein each of the fixing pieces 3 has a sensor holding groove 3b at a bottom surface of the fixing piece, and a tube receiving portion 3a protruded from one side of the fixing piece, which communicates with the sensor holding groove 3b; a tube 2 enclosing the fiber bragg grating sensor S is disposed between the pair of fixing pieces 3, such that both ends of the tube 2 are detachably secured to each of the tube receiving portions 3a of the fixing pieces 3 by a fastening member 4; and the fiber bragg grating sensor S is inserted into the tube 2, and both ends of the fiber bragg grating sensor S are firmly secured to the sensor holding groove 3b of the fixing piece 3 by an adhesive F.

[2] 2. The fixer as claimed in claim 1, further comprising a cover 6 for closing the sensor holding groove 3b of the fixing piece 3.

[3] 3. The fixer as claimed in claim 1, wherein the fixing means includes a tube receiving portion protruded from each side of the fixing pieces, a threaded hole formed on an upper portion of the tube receiving portion, and a fastening bolt threadedly engaged with the threaded hole for selectively compressing and fastening the tube.

[4] 4. The fixer as claimed in claim 1, wherein the sensor holding groove 3b is formed with at least one anti-slip groove 3c at an inner side thereof, so that when the adhesive F filled in the sensor holding groove is hardened, it prevents a clearance form being produced in the sensor holding groove 3b due to a coefficient of linear expansion between the fixing piece 3 and the adhesive F.

[5] 5. The fixer as claimed in claim 1, further comprising a fixing plate 7 attached to the object to be measured, so that the fixing piece 3 is detachably secured to the fixing plate 7 of the object by a fastening member 5.

[6] 6. The fixer as claimed in claim 1, wherein the tube 2 inserted into the tube receiving portion 3a is provided at both ends thereof with a tap 8 to easily prevent a rotation of the tube and maintain a horizontal state thereof,